



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/748,988

12/30/2003

David P. Goren

A35489-072797.0154

8253

21003 7590 06/26/2007  
BAKER BOTTS L.L.P.  
30 ROCKEFELLER PLAZA  
44TH FLOOR  
NEW YORK, NY 10112-4498

EXAMINER

NGUYEN, DUC M

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

06/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/748,988	<b>Applicant(s)</b> GOREN, DAVID P.	
	<b>Examiner</b> Duc M. Nguyen	<b>Art Unit</b> 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/5/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### **Information Disclosure Statement**

1. The references listed in the information disclosure statements submitted on 4/5/04 has been considered by the examiner (see attached PTO-1449).

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "switch" as recited in claim 5 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

Art Unit: 2618

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims **1-4, 6** are rejected under 35 U.S.C. 102(b) as being anticipated by **Gong et al** (US Pat. Number **2005/0032531**).

Regarding claim **1**, **Gong** teaches a wireless local area network wherein mobile units are provided with radios for transmitting and receiving data communications messages between said mobile units and fixed access points (see Fig. 1 and [0026]), and wherein said mobile units are located using signal strength for radio communications between said mobile units and said access points (see Fig. 3 and [0048], [0054]), the improvement wherein at least some of said access points are provided with antennas having antenna patterns with selected pattern shape for enhancing location of said mobile units (see [0028-0032], [0039], [0045]).

Regarding claim **2**, the claim is rejected for the same reason as set forth in claim 1 above. In addition, **Gong** would teach said selected pattern shapes include horizontally offset directional antenna patterns (see [0028-0032]).

Regarding claim **3**, the claim is rejected for the same reason as set forth in claim 1 above. In addition, **Gong** would teach said horizontally offset directional antenna patterns are horizontally offset in angular direction(see [0028-0032]).

Regarding claim **4**, the claim is rejected for the same reason as set forth in claim 1 above. In addition, **Gong** would teach at least some of said antenna patterns offset in angular direction are provided by an antenna having multiple angularly offset beams (see [0028-0032]).

Regarding claim **6**, the claim is rejected for the same reason as set forth in claim 1 above. In addition, **Gong** would teach said antennas having angularly offset beams are connected to multiple access point circuits (see [0046, 0054]).

### ***Claim Rejections - 35 USC 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2618

6. Claims **5, 7-11** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Gong**.

Regarding claim **5**, the claim is rejected for the same reason as set forth in claim 1 above. In addition, **Gong** would obviously, if not implicitly, suggest said antennas having angularly offset beams are connected by a switch to a single access point circuit (see [0068] regarding single AP).

Regarding claim **7**, the claim is rejected for the same reason as set forth in claim 1 above. In addition, since mounting antennas near the periphery (i.e, corners, entry) of a facility is well known in the art, it would have been obvious to one skilled in the art at the time the invention was made to modify Gong for mounting said antennas near the periphery of a facility as claimed, for maximizing a coverage area of a directional antenna beam in an indoor facility.

Regarding claim **8**, the claim is rejected for the same reason as set forth in claim 1 above. In addition, it would have been obvious to one skilled in the art at the time the invention was made to modify Gong for providing said horizontally offset directional beams in a horizontally offset in position as claimed, for simplifying the antenna patterns in an indoor facility (i.e, avoid overlapping beams in a small room).

Regarding claim **9**, the claim is rejected for the same reason as set forth in claim 8 above. In addition, since mounting antennas near the periphery (i.e, corners, entry) of a facility is well known in the art, it would have been obvious to one skilled in the art at the time the invention was made to modify Gong for providing said horizontally offset directional beams in a horizontally offset in position near the periphery of a facility as

claimed, for maximizing a coverage area of a directional antenna beam in an indoor facility.

Regarding claim **10**, the claim is rejected for the same reason as set forth in claim 8 above. In addition, it would have been obvious to one skilled in the art at the time the invention was made to modify Gong for providing said horizontally offset directional beams in a horizontally offset in position to correspond to aisles in a facility as claimed, for simplifying the antenna patterns in an indoor facility (i.e, avoid overlapping beams in a hallway).

Regarding claim **11**, the claim is rejected for the same reason as set forth in claim 8 above. In addition, it would have been obvious to one skilled in the art at the time the invention was made to modify Gong for providing said antennas locating at selected heights for achieving selected pattern shapes as claimed, for reducing blockings/obstructions, thereby maximizing a coverage area of an antenna beam in an indoor facility.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See the attached PTO-892.

8. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Art Unit: 2618

**or faxed to:**

(571) 273-8300 (for **formal** communications intended for entry)

(571)-273-7893 (for informal or **draft** communications).

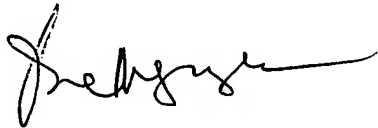
Hand-delivered responses should be brought to Customer Service Window,  
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry concerning this communication or communications from the examiner  
should be directed to Duc M. Nguyen whose telephone number is (571) 272-7893,  
Monday-Thursday (9:00 AM - 5:00 PM).

Or to Matthew Anderson (Supervisor) whose telephone number is (571) 272-  
4177.

Duc M. Nguyen, P.E.

June 18, 2007

A handwritten signature in black ink, appearing to read 'Duc Nguyen', written over the printed name and date.